MMM SEMINAR NCAR

On the Development and Evaluation of NCEP Global Forecast Systems

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The Global Forecast Systems (GFS) is the cornerstone of NCEP's operational numerical weather forecast suite. This presentation will first review GFS development history and its forecast skills in the past few decades, with a focus on its recent performance. Major changes in GFS dynamics, physics and data assimilation schemes and significant improvements in GFS forecast skills in the past will be highlighted. The evaluation includes forecast skills of atmospheric large-scale flow pattern, precipitation and hurricane track and intensity. The performance of GFS will be compared with other international NWP models. The second part of this presentation will describe the development of GFS forecast evaluation tools. A portable NWP model verification package has been developed in recent years. It is now widely used by modelers and forecasters at NCEP and the community. Recent effort is focused on the evaluation of surface weather sensible elements and on the application of object-oriented verification methods. At the end, major issues and near-future development of the GFS and requirements for more advanced model evaluation tools will be discussed.

This seminar will be webcast live at: http://www.fin.ucar.edu/it/mms/fl-live.htm

Recorded seminar link can be viewed here: https://www.mmm.ucar.edu/events/seminars

Thursday, 13 August 2015, 3:30 PM

Refreshments 3:15 PM NCAR-Foothills Laboratory 3450 Mitchell Lane Bldg 2 Main Auditorium, Room 1022

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